

Attorney's Docket No. 5577-348 (RSW920010159US1)

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Brabson *et al.*

Confirmation No.: 1822

Serial No.: 10/045,556

Group No.: 2152

Filed: January 11, 2002

Examiner: Dohm Chankong

For: DYNAMIC MODIFICATION OF APPLICATION BEHAVIOR IN RESPONSE TO  
CHANGING ENVIRONMENTAL CONDITIONS

January 30, 2007

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Michele P. McMahan

**APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. §41.37**

Sir:

This Appeal Brief is filed pursuant to the "Notice of Appeal to the Board of Patent Appeals and Interferences" mailed November 3, 2006 and the Notice of Panel Decision from Pre-Appeal Brief review mailed January 5, 2007.

**Real Party In Interest**

The real party in interest is assignee International Business Machines Corporation, Armonk, New York.

**Related Appeals and Interferences**

Appellants are aware of no appeals or interferences that would be affected by the present appeal.

**Status of Claims**

Appellants appeal the rejection of Claims 1-21, and 23, which as of the filing date of this Brief remain under consideration. The attached Appendix A presents the claims at issue at least twice rejected in the Office Action of August 8, 2006 (hereinafter "August 8 Office Action") which reopened prosecution in response to an Appeal Brief filed June 23, 2006, the Final Office Action of December 29, 2005 (hereinafter "Final Office Action") and the Advisory Action of April 17, 2006 (hereinafter "Advisory Action").

**Status of Amendments**

The attached Appendix A presents the pending claims and the corresponding status of each of the pending claims. All amendments in the present case have been entered.

**Summary of the Claimed Subject Matter**

The present application includes Independent Claims 1 and 24. The claims are method and system claims. Claim 1 is directed to methods of improving traffic management in a computing network. Such methods may be provided by detecting a changed environmental condition. *See, e.g.*, Specification, page 51, lines 15-17 and Figure 25 (block 2555). A notification of the detected condition is generated. *See, e.g.*, Specification, page 51, lines 17-19 and Figure 25. The generated notification is analyzed by consulting one or more criteria. *See, e.g.*, Specification, page 45, lines 8-10 and Figure 19 (block 1925). Based on the analysis, a currently-executing application determines whether the currently-executing application should modify a behavior of the currently-executing application. *See, e.g.*, Specification, page 52, lines 11-12 and Figure 25.

Claim 2 is directed to aspects of the invention where the currently-executing application modifies the behavior of the currently-executing application. *See, e.g.*, Specification, page 52, lines 11-17 and Figure 25.

Claim 3 is directed to aspects of the invention where the size of one or more data objects is reduced in the modifying step. *See, e.g.*, Specification, page 45, lines 12-14.

Claim 4 is directed to aspects of the invention where the data retrieval is reduced in the modifying step. *See, e.g.*, Specification, page 15, lines 14-15 and Figure 3A.

Claim 5 is directed to aspects of the invention where one or more connections with the currently-executing applications is dropped in the modifying step. *See, e.g.*, Specification, page 21, line 1.

Claim 6 is directed to aspects of the invention where the size of one or more data objects generated by the currently-executing application is increased in the modifying step. *See, e.g.*, Specification, page 45, lines 12-14.

Claim 7 is directed to aspects of the invention where the data retrieval is reduced in the modifying step. *See, e.g.*, Specification, page 15, lines 14-15 and Figure 3A.

Claim 8 is directed to aspects of the invention where the thread assignments of the currently-executing application are changed in the modifying step. *See, e.g.*, Specification, page 21, line 1.

Claim 9 is directed to aspects of the invention where use of one or more other applications by the currently-executing application is changed in the modifying step. *See, e.g.*, Specification, page 13, line 5.

Independent Claim 23 is directed to a system for improving traffic management in a computing network. The system includes means for detecting a changed environmental condition. *See, e.g.*, Specification, page 51, lines 15-17 and Figure 25 (block 2555). The structure corresponding to the means for detecting is provided by, for example, block 2555 in Figure 25. Responsive to the detected condition, the system includes means for generating notification thereof. *See, e.g.*, Specification, page 51, lines 17-19 and Figure 25. The structure corresponding to the means for generating notification is provided by, for example, block 2555 in Figure 25. Also included are means for analyzing the generated notification by consulting one or more criteria. *See, e.g.*, Specification, page 45, lines 8-10 and Figure 19 (block 1925). The structure corresponding to the means for analyzing the generated notification is provided by, for example, block 1925 in Figure 19. The system further includes means for determining, at a currently-executing application, whether the currently-executing application should modify a behavior of the currently-executing application. *See, e.g.*, Specification, page 20, lines 19-20 and Figure 5. The structure corresponding to the means for determining, at a currently executing application, whether the currently executing application should modify a behavior of the currently-executing application is provided by, for example, block 505 in Figure 5. The system

may be configured to modify, using the currently-executing application, the behavior of the currently-executing application. *See, e.g.*, Specification, page 52, lines 11-17 and Figure 25.

### **Grounds of Rejection to Be Reviewed on Appeal**

1. Claims 1-7, 9-12, 17-21, and 23 stand rejected under 35 U.S.C. § 102(b) as being anticipated by United States Patent No. 5,280,470 to Buhrke *et al.* (hereinafter "Buhrke"). (*See* August 8 Office Action, p.3.)
2. Claims 1 and 13-16 stand rejected under 35 U.S.C. § 102(b) as being anticipated by United States Patent No. 5,835,484 to Yamato *et al.* (hereinafter "Yamato"). (*See* August 8 Office Action, p. 6.)
3. Claim 8 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Buhrke in view of United States Patent No. 5,983,723 to Nahidipour *et al.* (hereinafter "Nahidipour"). (*See* August 8 Office Action, p. 8.)

### **Argument**

#### **I. Introduction to 35 U.S.C. §102/§103 Analysis**

Claims 1-7, 9-12, 13-16, 17-21, and 23 are rejected as anticipated under 35 U.S.C. §102. Under 35 U.S.C. § 102, "a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." M.P.E.P. § 2131 (quoting *Verdegaal Bros. v. Union Oil Co.*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987)). "Anticipation under 35 U.S.C. § 102 requires the disclosure in a single piece of prior art of each and every limitation of a claimed invention." *Apple Computer Inc. v. Articulate Sys. Inc.*, 57 U.S.P.Q.2d 1057, 1061 (Fed. Cir. 2000). "The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.'" M.P.E.P. § 2112 (citations omitted).

A finding of anticipation further requires that there must be no difference between the claimed invention and the disclosure of the cited reference as viewed by one of ordinary skill in the art. *See Scripps Clinic & Research Foundation v. Genentech Inc.*, 927 F.2d 1565, 1576, 18 U.S.P.Q.2d 1001, 1010 (Fed. Cir. 1991). In particular, the Court of Appeals for the Federal Circuit held that a finding of anticipation requires absolute identity for each and every element set forth in the claimed invention. *See Trintec Indus. Inc. v. Top-U.S.A. Corp.*, 63 U.S.P.Q.2d 1597 (Fed. Cir. 2002). Additionally, the cited prior art reference must be enabling, thereby placing the allegedly disclosed matter in the possession of the public. *In re Brown*, 329 F.2d 1006, 1011, 141 U.S.P.Q. 245, 249 (C.C.P.A. 1964). Thus, the prior art reference must adequately describe the claimed invention so that a person of ordinary skill in the art could make and use the invention.

Claim 8 is rejected as obvious under 35 U.S.C. §103(a). A determination under §103 that an invention would have been obvious to someone of ordinary skill in the art is a conclusion of law based on fact. *Panduit Corp. v. Dennison Mfg. Co.* 810 F.2d 1593, 1 U.S.P.Q.2d 1593 (Fed. Cir. 1987), *cert. denied*, 107 S.Ct. 2187. After the involved facts are determined, the decision maker must then make the legal determination of whether the claimed invention as a whole would have been obvious to a person having ordinary skill in the art at the time the invention was unknown, and just before it was made. *Id.* at 1596. The United States Patent and Trademark Office (USPTO) has the initial burden under §103 to establish a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988).

To establish a *prima facie* case of obviousness, the prior art reference or references when combined must teach or suggest *all* the recitations of the claims, and there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. M.P.E.P. §2143. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. M.P.E.P. §2143.01, citing *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990). As emphasized by the Court of Appeals for the Federal Circuit, to support combining references, evidence of a suggestion, teaching, or motivation to combine must be **clear and particular**, and this requirement for clear and particular evidence is not met by broad

and conclusory statements about the teachings of references. *In re Dembiczak*, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999). In another decision, the Court of Appeals for the Federal Circuit has stated that, to support combining or modifying references, there must be **particular** evidence from the prior art as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed. *In re Kotzab*, 55 U.S.P.Q.2d 1313, 1317 (Fed. Cir. 2000).

Appellants respectfully submit that the pending claims are patentable over the cited references for at least the reason that none of the cited references, either alone or in combination, thereof disclose or suggest all of the recitations of the claims. The patentability of the pending claims is discussed in detail hereinafter.

## **II. The Section 102 Rejections**

As a preliminary note, Appellants' Amendment After Final of March 29, 2006 was not entered. The recitations added to the claims in this amendment were implicit in the claims and explicit in Appellants' arguments and were only added to expedite allowance of the present application. Accordingly, the pending claims are currently in the form as set out in the Listing of Claims in Appellants' Amendment of October 25, 2005.

### **A. Claims 1 and 23 Are Patentable Over Buhrke**

As stated above, Independent Claims 1 and 23 stand rejected under 35 U.S.C. § 102 as being anticipated by Buhrke. *See* August 8 Office Action, p. 3. Appellants respectfully submit that many of the recitations of these claims are neither disclosed nor suggested by the cited references. For example, Claim 1 recites:

A method of improving traffic management in a computing network, comprising steps of:

detecting a changed environmental condition;  
generating a notification of the detected condition;  
analyzing the generated notification by consulting one or more criteria; and  
**determining at a currently-executing application, based on the analysis, whether the currently-executing application should modify a behavior of the currently-executing application.**

Claim 23 contains corresponding system recitations. Appellants respectfully submit that at least the highlighted recitations of Claim 1 are neither disclosed nor suggested by Buhrke.

The August 8 Office Action points to Buhrke as teaching all of the recitations of Claim 1. *See* August 8 Office Action, pages 3-4. Buhrke discusses the negotiation process between the terminal equipment (TE1 and TE2) and the network switch 4 before a virtual channel is established. *See* Buhrke, column 5, lines 1 through 14. In other words, the terminal equipment TE1/TE2 sends a request to the switch 4 specifying a minimum quality of service (rate) it can tolerate for the information to be transmitted. *See* Buhrke, column 5, lines 1 through 10. The switch can either accept the quality of service terms provided by the terminal equipment, reject the quality of service terms provided by the terminal equipment or modify the quality of service terms provided by the terminal equipment. *See* Buhrke, column 5, lines 10 through 14 and lines 20-33. If the switch modifies the quality of service terms, the terminal equipment may either accept or reject the modified terms. If the terminal equipment and the switch reach an agreement, the virtual channel can be established having these minimum agreed upon quality of service terms. Buhrke also discusses modification of the quality of service terms after the virtual channel has been set up. *See* Buhrke, column 5, lines 34-46. This modification is initiated by the switch by requesting a load reduction from the terminal equipment. *See* Buhrke, column 5, lines 37-39.

In contrast, Claim 1 recites "*determining at a currently-executing application*, based on the analysis, whether *the currently-executing application should modify a behavior of the currently-executing application*." Thus, the currently-executing application actually determines if a modification is needed and modifies its own behavior, a determination that is not made at a switch as discussed in Buhrke. As recited in the specification of the present application the "file or traffic stream is adapted for the current environmental conditions during its (the file or traffic streams) creation -- that is, by the application which originally creates the data." *See* Specification, page 15, lines 9-11. Thus, the currently-executing application of the present application "participates in ensuring that traffic management operates efficiently and effectively." *See* Specification, page 17, lines 9-10. Thus, the teachings of Claim 1 may do away with the need for Buhrke because the "quality of service" may be determined by the application itself without any interaction with a switch.

In response to these arguments, the Final Office Action states that "Applicants['] characterization of Buhrke is not entirely accurate." *See* Final Office Action, page 2. The Final Office Action proceeds to explain that "[t]he determination of whether the application should be modified takes place in both the terminal application and the switch..." *See* Final Office Action, pages 2-3. Appellants respectfully submit that Appellants' characterization of Buhrke, as discussed above, is entirely consistent with the explanation provided in the Final Office Action. As is clear in the above discussion, Appellants acknowledge that "both" the switch and the terminal application are involved, however, as also noted above, if **both** the terminal equipment and the switch reach an agreement, the virtual channel can be established having these minimum agreed upon quality of service terms. Thus, Appellants reiterate that Buhrke also discusses modification of the quality of service terms after the virtual channel has been set up. *See* Buhrke, column 5, lines 34-46. This modification, however, is initiated by the switch by requesting a load reduction from the terminal equipment. *See* Buhrke, column 5, lines 37-39.

Buhrke does not, however, disclose or suggest that the currently-executing application actually analyzes and determines if a modification is needed and modifies its own behavior as recited in Claim 1. In other words, as stated in the specification of the present invention, "the file or traffic system is adapted for the current environmental conditions during its creation – that is, by the application which originally creates the data." *See* Specification, page 15, lines 9-11. In Buhrke, the application is not aware of the environmental conditions, it just receives rates from the switch that it may either reject or accept. *See* Final Office Action, page 3 and Buhrke, column 5, lines 10 through 14 and lines 20-33. Accordingly, nothing in Buhrke discloses or suggests determining *at the currently-executing application*, based on the analysis, whether *the currently-executing application should modify a behavior of the currently-executing application* as recited in Claims 1 and 23 for at least these additional reasons.

Furthermore, the Final Office Action states that "the amended claims merely disclose that there is a determination step performed at a currently-executing application and does not explicitly claim against interaction with another device as part of the determination process." *See* Final Office Action, page 3. Appellants respectfully submit that the fact that the analyzing occurs at the currently-executing application was implicit in the claims and explicit in Appellants' arguments.

Accordingly, Appellants respectfully submit that Independent Claims 1 and 23 are patentable over Buhrke for at least these additional reasons. Furthermore, the dependent claims are patentable at least per the patentability of Independent Claim 1 from which they depend. Accordingly, Appellants submit that Independent Claims 1 and 23 and the claims that depend therefrom are in condition for allowance, which is respectfully requested in due course. For at least these reasons, Appellants request that the rejection of Independent Claims 1 and 23 and the claims that depend therefrom be reversed.

**B. Claim 1 is Patentable Over Yamato**

As stated above, Independent Claim 1 stands rejected under 35 U.S.C. § 102 as being anticipated by Yamato. *See* August 8 Office Action, page 6. Appellants respectfully submit that many of the recitations of this claim are neither disclosed nor suggested by the cited references. For example, Appellants respectfully submit that at least the highlighted recitations of Claim 1 set out above are neither disclosed nor suggested by Yamato.

The August 8 Office Action points to Yamato as teaching all of the recitations of Claim 1. *See* August 8 Office Action, pages 6-7. Yamato discusses a system including a cell traffic regulation unit that is configured to regulate congestion. In contrast, Claim 1 recites "determining *at a currently-executing application*, based on the analysis, whether *the currently-executing application should modify a behavior of the currently-executing application*." Thus, the currently-executing application actually determines if a modification is needed and modifies its own behavior, this determination is not made at a cell traffic regulation unit as discussed in Yamato. As recited in the specification of the present application the "file or traffic stream is adapted for the current environmental conditions during its (the file or traffic streams) creation -- that is, by the application which originally creates the data." *See* Specification, page 15, lines 9-11. Thus, the currently-executing application of the present application "participates in ensuring that traffic management operates efficiently and effectively." *See* Specification, page 17, lines 9-10. Thus, the teachings of Claim 1 may do away with the need for Yamato's cell traffic regulation unit because the regulation may be done by the application itself without any interaction with a switch. Accordingly, nothing in Yamato discloses or suggests determining *at a currently-executing application*, based on the analysis, whether *the currently-executing*

*application should modify a behavior of the currently-executing application* as recited in Claim 1 for at least these reasons.

The August 8 Office Action states that the "cell traffic regulation unit" is interpreted as the currently-executing application. *See August 8 Office Action, page 7.* Appellants respectfully submit that the cell traffic regulation unit of Yamato cannot be the currently-executing application as recited in Claim 1. In particular, Yamato states:

The cell traffic regulation unit 200 has a regulation unit 201 for monitoring the cell flowing into the node system 112 through a connection 121, a control unit 202 for controlling the regulation unit 201 to regulate the cell flow on the connection 121, and a congestion detection unit 203 for detecting the occurrence of the congestion in the node system 112 by monitoring the cell flowing out from the node system 112 through a connection 122. This cell traffic regulation unit 200 is to be attached at any connection in the ATM network for which the monitoring is desired.

*See Yamato, column 5, lines 53-62.* Thus, the cell traffic regulation unit of Yamato does just that, it regulates/monitors traffic sent between applications, but is not a currently-executing application as recited in Claim 1.

Accordingly, Appellants respectfully submit that Independent Claim 1 is patentable over Yamato for at least these additional reasons. Furthermore, the dependent claims are patentable at least per the patentability of Independent Claim 1 from which they depend. Accordingly, Appellants submit that Independent Claim 1 and the claims that depend therefrom are in condition for allowance, which is respectfully requested in due course. For at least these reasons, Appellants request that the rejection of Independent Claim 1 and the claims that depend therefrom be reversed.

### **C. Many of the Dependent Claims are Separately Patentable**

Many of the dependent claims are separately patentable over the cited references.

#### **1. Claim 3 is Separately Patentable**

For example, Claim 3 recites:

The method according to Claim 2, wherein the modification comprises reducing a size of one or more data objects generated by the currently-executing application.

The August 8 Office Action points to a portion of Buhrke that teaches reducing a rate of cells as teaching the recitations of Claim 3. *See August 8 Office Action, page 4.* However, Claim 3

recites "reducing a size of one or more data objects," not the rate at which these data objects are sent. Again, as discussed above, the currently-executing application actually reduces the size of the data objects transmitted responsive to based on the analysis.

Responsive to Appellants' arguments, the Final Office Action states that "Buhrke discloses the terminal may modify its behavior by alternating sending "empty" (zero length) cells then regular length cells based on network conditions [column 4, <<lines 14-23>>] thereby teaching a reduction or increase in the length of the cell." *See* Final Office Action, page 3. Appellants respectfully submit that the Final Office Action incorrectly reads a zero-length attribute into the empty cells disclosed in Buhrke. In contrast with the statements in the Final Office Action (page 3), Buhrke states that the cells, which are a basic unit of data transmission, are short fixed length data cells. *See* Buhrke, column 1, lines 44-48. Furthermore, the empty cells of Buhrke appear to have the same length as the non-empty cells and are empty in that they lack any meaningful content. Thus, nothing in Buhrke discloses or suggests such a reduction as recited in Claim 3. Accordingly, Appellants submit that Claim 3 is separately patentable over Buhrke for at least these additional reasons. Accordingly, Appellants request that the rejection of Claim 3 be reversed.

## **2. Claim 4 is Separately Patentable**

For example, Claim 4 recites:

The method according to Claim 2, wherein the modification comprises reducing data retrieval by the currently-executing application.

Again, Buhrke discusses a negotiation of rate between the terminal equipment and the switch. Nothing in Buhrke discloses or suggests a reduction in data retrieval by the application as recited in Claim 4. Accordingly, Appellants submit that Claim 4 is separately patentable over Buhrke for at least these additional reasons. Accordingly, Appellants request that the rejection of Claim 4 be reversed.

## **3. Claims 5, 6, 7, and 9 are Separately Patentable**

Similarly, Claims 5, 6, 7 and 9 recite "wherein the modification comprises dropping one or more connections with the currently-executing application," "wherein the modification comprises increasing a size of one or more data objects generated by the currently-executing application," "wherein the modification comprises increasing data retrieval by the currently-

executing application," and "wherein the modification comprises changing the currently-executing application's use of one or more other applications." Buhrke discusses a negotiation of rate between the terminal equipment and the switch. Nothing in Buhrke discloses or suggests the modifications by the currently-executing application as recited in Claims 5 through 7 and 9. Accordingly, Appellants submit that Claims 5 through 7 and 9 are separately patentable over Buhrke for at least these additional reasons. Accordingly, Appellants request that the rejection of Claims 5 through 7 and 9 be reversed.

Appellants respectfully submit that many of the dependent claims are also separately patentable over the cited references for at least the reasons discussed above. Accordingly, Appellants respectfully request reversal of the rejections with respect to the dependent claims.

### **III. The Section 103 Rejection**

As stated above, Claim 8 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Burhke in view of Nahidipour. Appellants respectfully submit that the recitations of Claim 8 are neither disclosed nor suggested by the cited references.

As discussed above, Appellants respectfully submit that dependent Claim 8 is patentable at least per the patentability of Independent Claim 1 from which it depends. However, Claim 8 is also separately patentable over the cited combination.

In particular, Appellants submit that there is no motivation or suggestion to combine the cited references as suggested in the August 8 Office Action.

The August 8 Office Action states:

It would be obvious to one of ordinary skill in the art at the time the time of the invention to modify Buhrke et al. by changing thread assignments (e.g. reducing threads) of a currently executing application, as taught by Nahidipour et al. in order to ensures improved data transfer efficiency, lower utilization of system resources, and memory as number of threads for system calls is reduced.

*See* August 8 Office Action, page 9 (citations omitted). This motivation is a motivation based on "subjective belief and unknown authority", the type of motivation that was rejected by the Federal Circuit in *In re Sang-su Lee*. In other words, the August 8 Office Action does not point to any specific portion of the cited references that would induce one of skill in the art to combine

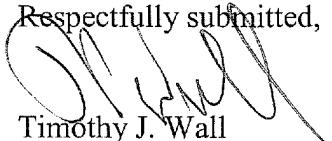
these particular cited references as suggested in the August 8 Office Action. If the motivation provided in the August 8 Office Action is adequate to sustain the Office's burden of motivation, then anything that would ensure "improved data transfer efficiency, lower utilization of system resources ..." would render a combination obvious. This cannot be the case. Accordingly, the statement in the August 8 Office Action with respect to motivation does not adequately address the issue of motivation to combine as discussed in *In re Sang-su Lee*. Thus, it appears that the August 8 Office Action gains its alleged impetus or suggestion to combine the cited references by hindsight reasoning informed by Appellants' disclosure, which, as noted above, is an inappropriate basis for combining references.

Furthermore, Buhrke discusses bandwidth and congestion management in accessing broadband ISDN networks as recited in the title. Nahidipour discusses using the UNIX physio to allow data to be transferred on a plurality of channels concurrently as recited in the title. Nothing in the cited references or the art itself would motivate a person of skill in the art to combine Buhrke and Nahidipour as suggested in the August 8 Office Action. Furthermore, even if Buhrke and Nahidipour could be properly combined, the combination of would not teach the recitations of the pending claims for at least the reasons discussed herein and in Appellants' previous Office communications.

**III. Conclusion**

In light of the above, Appellants request reversal of the rejections of the claims, allowance of the claims and passing of the application to issue.

It is not believed that an extension of time and/or additional fee(s) are required, beyond those that may otherwise be provided for in documents accompanying this paper. In the event, however, that an extension of time is necessary to allow consideration of this paper, such an extension is hereby petitioned for under 37 C.F.R. §1.136(a). Any additional fees believed to be due in connection with this paper may be charged to Deposit Account No. 09-0461.

Respectfully submitted,  
  
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## APPENDIX A

1. (Previously Presented) A method of improving traffic management in a computing network, comprising steps of:
  - detecting a changed environmental condition;
  - generating a notification of the detected condition;
  - analyzing the generated notification by consulting one or more criteria; and
  - determining at a currently-executing application, based on the analysis, whether the currently-executing application should modify a behavior of the currently-executing application.
2. (Previously Presented) The method according to Claim 1, further comprising the step of modifying, by the currently-executing application, the behavior of the currently-executing application.
3. (Original) The method according to Claim 2, wherein the modification comprises reducing a size of one or more data objects generated by the currently-executing application.
4. (Original) The method according to Claim 2, wherein the modification comprises reducing data retrieval by the currently-executing application.
5. (Original) The method according to Claim 2, wherein the modification comprises dropping one or more connections with the currently-executing application.
6. (Original) The method according to Claim 2, wherein the modification comprises increasing a size of one or more data objects generated by the currently-executing application.
7. (Original) The method according to Claim 2, wherein the modification comprises increasing data retrieval by the currently-executing application.

8. (Original) The method according to Claim 2, wherein the modification comprises changing thread assignments of the currently-executing application.

9. (Original) The method according to Claim 2, wherein the modification comprises changing the currently-executing application's use of one or more other applications.

10. (Original) The method according to Claim 1, wherein the changed environmental condition pertains to system-related conditions.

11. (Original) The method according to Claim 1, wherein the changed environmental condition pertains to network-related conditions.

12. (Original) The method according to Claim 1, wherein the changed environmental condition pertains to client-related conditions in one or more clients of the currently-executing application.

13. (Original) The method according to Claim 1, wherein the changed environmental condition occurred internally to a system in which the currently-executing application is executing.

14. (Original) The method according to Claim 13, wherein the generated notification pertains to a condition of a local network protocol stack.

15. (Original) The method according to Claim 13, wherein the generated notification pertains to a condition of the system in which the currently-executing application is executing.

16. (Original) The method according to Claim 13, wherein the analyzing step is performed by a policy manager component of the system in which the currently-executing application is executing.

17. (Original) The method according to Claim 1, wherein the changed environmental condition occurred externally to a system in which the currently-executing application is executing.

18. (Original) The method according to Claim 17, wherein the generated notification pertains to a condition of a client of the currently-executing application.

19. (Original) The method according to Claim 17, wherein the generated notification pertains to a condition of a remote network platform.

20. (Original) The method according to Claim 17, wherein the generated notification pertains to a condition of a remote server with which the currently-executing application is communicating.

21. (Original) The method according to Claim 20, wherein the modification comprises making adjustments pertaining to the remote server.

22. (Cancelled)

23. (Previously Presented) A system for improving traffic management in a computing network, comprising:

means for detecting a changed environmental condition;  
means for generating a notification of the detected condition;  
means for analyzing the generated notification by consulting one or more criteria;  
means for determining at a currently-executing application, based on the analysis, whether the currently-executing application should modify a behavior of the currently-executing application; and  
modifying, by the currently-executing application, the behavior of the currently-executing application.

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24. (Cancelled)

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**APPENDIX B – EVIDENCE APPENDIX**  
**(NONE)**

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**APPENDIX C – RELATED PROCEEDINGS**  
**(NONE)**